MR2707-58
Serial Number: 10/765,039
Response to Office Action dated 5 April 2007

<u>AMENDMENTS TO THE DRAWINGS</u>

The attached sheets of Drawings include changes to Figure 1 and 2. The sheet

which includes Figure 1, replaces the original sheet including Figure 1. The sheet, which

includes Figure 2, replaces the original sheet including Figure 2. In Figures 1 and 2, the

previously omitted legend -- PRIOR ART – has been added.

Attachment: Two Replacement Sheets.

MR2707-58
Serial Number: 10/765,039
Response to Office Action dated 5 April 2007

REMARKS/ARGUMENTS

This case has been carefully reviewed and analyzed in view of the Office Action

dated 5 April 2007.

In the Office Action, Figures 1 and 2 of the Drawings were objected to since they

were not designated by an appropriate legend. Accordingly, Figures 1 and 2 have been

amended, and now include the legend -- PRIOR ART-- .

Claims 1-17 were indicated as allowable. The allowance of Claims 1-17 is

acknowledged and appreciated.

Claims 20, 24, 25, 27 and 31-33 were objected to in the Office Action, however,

the Examiner indicated that these Claims would be allowable if rewritten in independent

form including all the limitations of the base Claim and any intervening Claims.

Further, in the Official Action, Claims 18-19, 21-23, 26, and 28-30 were rejected

under 35 U.S.C. §103(a) as being unpatentable over Chen, et al. (U.S. Patent Publication

No. 2002/0158862); in view of Koyama, et al. (U.S. Patent No. 5,680,149).

Chen, et al. is directed to a central symmetric gamma voltage correction circuit

which is formed by two resistors, a varistor and two buffers. An external voltage V_{cc} is

divided by resistors R_a and R_b, and a varistor V_R as shown in Fig. 4 of Chen, et al. When

resistance values of the resistors R_a and R_b are equal, by adjusting the resistance of the

varistor V_R, symmetrical output voltages $(V_{th}+)$ and $(V_{th} -)$ are acquired from two ends of

the varistor V_R.

It is respectfully submitted, that in contrast to the present gamma voltage

generator, Chen, et al. fails to disclose a current mirror and a current source.

Page 16 of 21

MR2707-58
Serial Number: 10/765,039
Response to Office Action dated 5 April 2007

While in the present device, a current source I_S provides for a reference current. Also, a mirror mapping circuit is employed for generating a plurality of gamma currents. These features are completely missing in Chen, et al.

Further, in contrast to the claimed arrangement, in Chen, et al., the central symmetric gamma voltage correction circuit generates a positive polarity correction voltage ($V_{th}+$) and a negative polarity correction voltage ($V_{th}-$) at two ends in the varistor V_R. However, the circuit in Chen, et al. never generates the common voltage V_{COM} in the circuit, and therefore, an output for V_{COM} in the circuit is not provided.

While in the present device, a common gamma voltage V_{GCOM} is generated by the unit 102 and the amplifier 114, as shown in Figure 3 of the present Patent Application. The generated V_{GCOM} is output to the mirror circuit to serve at the axis of symmetry for the plurality of gamma voltages V_{G1}-V_{G5} supplied to the mirror circuit, and the gamma voltages V_{G6}-V_{G10} which are output from the mirror circuit. This feature is never presented in Chen, et al.

The Examiner admitted that Chen, et al. fails to disclose a current source and a current mirror; and cited the Koyama, et al. Patent as employing a current source and a current mirror.

It is respectfully submitted that although Koyama, et al. refers to the mirror circuit constructed by N-channel TFTs 106 and 107, this reference, however, fails to teach or suggest the mirroring of the reference current supplied by the current source to generate a plurality of gamma currents, as is the case in the present device.

Page 17 of 21

MR2707-58
Serial Number: 10/765,039
Response to Office Action dated 5 April 2007

Therefore, even if the central symmetric gamma voltage correction circuit of

Chen, et al. is modified with the driving circuit of Koyama, et al., the combination of

these two references is still missing a current mirror for mirroring the reference current to

generate a plurality of gamma currents, as well as the means for generating a common

gamma voltage proportional to the gamma current to serve as a center axis for the

plurality of first and second gamma voltages distributed substantially symmetric each to

the other, as claimed in Claims 18 and 26.

Accordingly, the allowance of Claims 18 and 26 over the cited references, taken

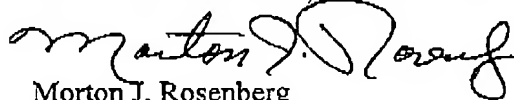solely or in combination thereof, is believed; and the same is respectfully requested.

Claims 19-25, dependent on Claim 18, and Claims 27-33, dependent on Claim 26,

are believed to be allowable for at least the reason of their dependency on what is

believed to be an allowable Claim.

It is now believed that the subject Patent Application has been placed in condition

for allowance, and such action is respectfully requested.

If there are any further charges associated with this filing, the Honorable

Commissioner for Patents is hereby authorized to charge Deposit Account #18-2011 for

such charges.

Respectfully submitted,
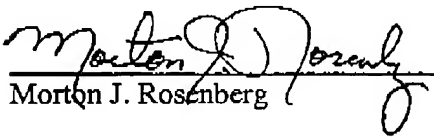For: ROSENBERG, KLEIN & LEE

Morton J. Rosenberg
Rosenberg, Klein & Lee   Registration No.: 26,049
3458 Ellicott Center Dr., Suite 101   Dated: _9/5/07_
Ellicott City, MD 21043
(410) 465-6678
Customer No.: 04586

MR2707-58

CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this paper is being facsimile transmitted to the U.S. Patent

and Trademark Office, Art Unit # 2629 facsimile number 571-273-8300 on the date

shown below.

FOR: ROSENBERG, KLEIN & LEE

_____   9/5/07
Morton J. Rosenberg   Date